REMARKS

The September 22, 2005 non-final office action has been reviewed and its content carefully noted. Favorable reconsideration of this case is respectfully requested. Claims 1-6 are pending in this application and are currently rejected.

Applicants have amended claim 1 to further clarify that the amount of lower valence oxides is about 0.1 to 20 wt% of the mixture and that the thickness of the physically vapor-deposited film is about 5 to 500 nm. The film of claim 1 is further defined as having a transparency of at least 30% at a wavelength of 550 nm. Support for the amendment to claim 1 may be found *inter alia* in the specification on page 5, lines 5-18. Reconsideration of the application is respectfully requested.

Abstract

The Examiner has objected to the abstract because it contains the legal word "comprising."

Applicants have amended the abstract to delete the word "comprising" and to more accurately reflect the more novel aspects of the invention.

Double Patenting Rejection

The Examiner has provisionally rejected claims 1, 2, 5, 4 and 6 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 5, 6, 13, 14, 19-24, 33-36 and 38 of co-pending Application No. 10/339,479.

In response, Applicants will gladly submit a terminal disclaimer in compliance with 37 CFR §1.321(c) upon the indication of allowable subject matter. In view that no allowable subject matter has been indicated, the submission of terminal disclaimer is premature.

Claim Rejections – 35 U.S.C. §102

A. US 6,074,981 to Tada et al.

The Examiner has rejected claims 1, 2, 3, 5 and 6 under 35 U.S.C. 102(b) as being

anticipated by US Patent No.: 6,074,981 to Tada et al. ("Tada").

In response to the Examiner's rejection, Applicants respectfully point out the standard for anticipation as set forth in MPEP §2131:

> A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros.v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as contained in the ... claim. Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim.

The claims of the present invention are not anticipated by Tada because Tada does not disclose each and every element as set forth in the claims. Tada discloses a photocatalyst layer containing fluorine and metallic oxide for increasing the metallic oxide's photocatalytic activity. One of the characteristics of the Tada invention is the significantly increased photocatalytic activity level possible by having a photocatalyst layer containing fluorine. (Col. 3, line 66: Col. 4, line 1). The preferred amount of the fluorine in the photocatalytic layer is in the ranger of 0.02 – 1.0 percentage by weight. (Col. 5, lines 38-42). Tada does not disclose a mixture of principal oxides containing oxygen in -2 valence state as a main component and a small amount of oxides having a lower valence than the principal oxides as a secondary component, wherein the amount of lower valence oxides is about 0.1 to 20 wt% of the mixture. Nor does Tada disclose a film having a transparency of at least 30% at a wavelength of 550 nm. Because Tada fails to disclose such a mixture or the said transparency, Tada fails to disclose each and every element of the claimed invention. Therefore, the Examiner's rejection is improper and should be withdrawn.

Claim Rejections – 35 U.S.C. §103

A. US 6,074,981 to Tada et al.

The Examiner has rejected claim 4 under 35 U.S.C. 103(a) as being unpatentable over Tada.

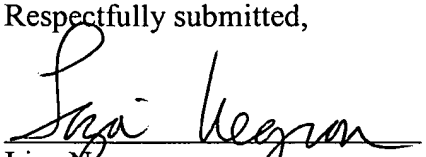
Applicants respectfully traverse the Examiner's rejection as being improper in view of MPEP §2143 providing:

> To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

Applicants respectfully submit that a prima facie case of obviousness has not been set forth because the office action fails to provide any teaching or suggestion of all the limitations of amended claim 4. Tada teaches methods for incorporating fluorine into the photocatalyst layer by directly adding fluorine compound to the material that forms the photocatalyst layer and establishing a fluorine containing layer in advance. (Col. 4, lines 5-12). Tada also teaches the use of vacuum deposition to form a titanium oxide crystalline thin film. (Col. 3, lines 1-3). However, Tada does not teach or suggest the claimed method for making the functional fiber sheet of claim 1. Because the cited reference fails to teach or suggest all the limitations of amended claim 4, the rejection is improper and should be withdrawn.

Applicants respectfully submit that this application is in condition for allowance. Early and favorable action is earnestly solicited. If for any reason the application is not deemed in condition for allowance, the Examiner is respectfully requested to contact the undersigned attorney.

Respectfully submitted,



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